AMENDMENTS TO THE CLAIMS

Please accept amended Claims 21 and 31 and new Claims 40-42 as follows:

21. (Currently Amended) A device having stored codes executable by a processor for causing the processor to perform method steps to resolve ambiguities in keyboard entries, the method comprising the steps of:

receiving a stream of digits in a sequence according to sequence of key selection from said keyboard, each key of said keyboard outputting upon selection a unique digit representing more than one letters;

matching said stream of digits in sequence against a look-up-table of known words; and

~~outputting a known word if there is a match from said matching~~ outputting one of a plurality of known words matched from said look-up-table based on a higher probability dependent from a category of a previously matched word in a sentence including the output word and the previously matched word.

22. (Previously Presented) The device according to claim 21, further including codes for causing said processor to reconstruct a word if no known words stored in the look-up-table matches said stream of digits.

23. (Previously Presented) The device according to claim 22, further including codes for causing said processor to select a plurality of words based on probability of occurrence.

24. (Previously Presented) The method according to claim 21, further including the steps of:

retrieving partial matches if there is no match of a known word;

performing affix or suffix analysis on said stream of digits; and

removing affixes suffixes found to reconstruct a known work.

25. (Previously Presented) The method according to claim 21, further including:

recursively constructing said string of digits to a proper name if there is no match of a known word.

26. (Previously Presented) The method according to claim 21, further including:

outputting all known words if more than one known word matches said string of digits; and

choosing one of said matches and use the chosen word in a sentence.

27. (Previously Presented) The method according to claim 26, further including the steps of:

reconstructing a plurality of words based on probability of occurrence;

choosing words based on proper position; and

editing unknown words to form a sentence.

28. (Previously Presented) The method according to claim 21, further including:

outputting one of a plurality of known words matched from said look-up-table based on a higher probability dependent from a preceding word.

29. (Previously Presented) The device according to claim 21, wherein said look-up-table is a listing of non-English characters correlated with predetermined digit strings based on phonetics.

30. (Previously Presented) The device according to claim 29, wherein said non-English characters are Chinese.

31. (Currently Amended) A device for resolving ambiguities in letter entries, comprising:

a processor and associated storage for storing a program executable by said processor;

a database of words addressable against a string of digits; and

a keyboard for outputting said string of digits to said database, said keyboard having a plurality of keys, each of which outputting a digit representing more than one letters, wherein said processor executes said program to cause an output of a word from said database based on said string of digits received from said keyboard and a category of a previously matched word in a sentence including the output word and the previously matched word.

32. (Previously Presented) The device according to claim 31, further including a display for displaying said word output from said database.

33. (Previously Presented) The device according to claim 31, wherein said keyboard has less than twenty-four (24) keys.

34. (Previously Presented) The device according to claim 31, wherein said keyboard is a QWERTY keyboard.

35. (Previously Presented) The device according to claim 31, wherein said program includes codes executable by said processor for reconstructing a word if no word in said database matches said string of digits.

36. (Previously Presented) The device according to claim 35, wherein said program includes codes executable by said processor for selecting one of a plurality of words output from said database on probability of occurrence.

37. (Previously Presented) The device according to claim 36, wherein a word is chosen based on a preceding word.

38. (Previously Presented) The device according to claim 31, wherein a plurality of words matching said string of digits is displayed, and one of said plurality of words is chosen by entry of one of said keys on said keyboard.

39. (Previously Presented) The device according to claim 31, wherein said database stores non-English characters matched against said string of digits, said string of digits being chosen based on a phonetic representation of said non-English characters.

40. (New) A device having stored codes executable by a processor for causing the processor to perform method steps to resolve ambiguities in keyboard entries, the method comprising the steps of:

receiving a stream of digits in a sequence according to sequence of key selection from said keyboard, each key of said keyboard outputting upon selection a unique digit representing more than one letters;

matching said stream of digits in sequence against a look-up-table of known words, wherein said look-up-table is a listing of non-English characters correlated with predetermined digit strings based on phonetics;

determining a known word if there is a match from said matching of said stream of digits;

matching the known word against a look-up-table of known characters;

determining a known character if there is a match from said matching of the known word; and

outputting a character corresponding to the known word, wherein ambiguities in determining the known character are resolved according to a sentence reconstruction.

41. (New) The device according to claim 21, wherein the sentence reconstruction includes determining a transitional probability of a use of the character in a sequence of characters.

42. (New) The device according to claim 21, wherein the sentence reconstruction includes determining a probability of relative position of characters including the character based on categories of at least another character in a sequence of characters.